



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,759	05/20/2005	Rudolf Braungardt	BRAUNGARDT, R. ET AL-2 PC	7721
25889	7590	08/08/2007	EXAMINER	
WILLIAM COLLARD COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			BODAWALA, DIMPLE N	
			ART UNIT	PAPER NUMBER
			1722	
			MAIL DATE	DELIVERY MODE
			08/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/535,759	BRAUNGARDT ET AL.	
	Examiner	Art Unit	
	Dimple N. Bodawala	1722	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4-9,14,17-19 and 22-24 is/are rejected.
- 7) ☒ Claim(s) 3,10-13,15,16,20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Drawings*

The drawings were received on June 08, 2007. These drawings are acceptable.

### *Response to Amendment*

Claims 2-24 are pending.

Claim 1 is canceled.

In view of the amendment, filed on June 08, 2007, following Rejections /Objections are withdrawn for the reasons of record given in the previous office action, mailed on February 09, 2007.

- ❖ Objection of drawings.
- ❖ Objection of specification.
- ❖ Rejection of claims 4, 14, and 21-23 under 35 U S C 112, second paragraph.
- ❖ Rejection of claims 1-23 under 35 U S C 103(a) as being unpatentable over Huber et al. (U S Patent No. 3,932,098) in view of Leipold et al. (U S Patent No. 2,413,109).

*Response to Arguments*

Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

*New Grounds of Rejection*

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7, 8, 17-19, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Braungardt et al. (U S Publication Application No. 2005/0238751 A1).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to claim 24, Braungardt ('751) discloses a molding insert for molding machine for forming a concrete block forming apparatus, which comprises an insert (FE) with plurality of cavities (FN) for determining a contour of a molded brick; an insert support for holding insert against vibrating base, wherein the insert support comprises a rigid twist-resistant hollow case having an intermediate plate as a base plate located between the vibrating table and the molding insert (See paragraph #4) for forming the base of the case. It further teaches that the mold insert is closed off at the top (See paragraph 2), which inherently teaches that the cover plate vertically distanced from the base plate and forming a top portion of the case, and a plurality of side walls inherently connecting the base plate and the cover plate. It further teaches that the case comprises a recess (AA) for accommodating the insert, wherein recess (AA) has edges for horizontally supporting the insert (FE), wherein insert (FE) is inherently vertically supported by the intermediate plate and the top plate.

As to claim 7, it further teaches that the insert inherently support itself on the inner surface of the base plate or the cover plate (See figure 4).

As to claim 8, it further teaches that the case of multi layered production, wherein the insert (FE) is pushed through the pressure plate from the outside, until it comes to a stop on a first one of the two plates, and is attached to the second of the two plate (See paragraph 24).

As to claim 17, it further teaches that the sidewalls have a relief structure (RS) for holding the case or cavity in a corresponding counter relief (GR) of a molding frame (See figure 2, paragraph 26).

As to claim 18, it further teaches that the relief (RS) comprises a groove (NU) milled into a sidewall (See paragraph 28).

As to claim 19, it further teaches that the relief (RS) is formed by multiple bending of the sheet metal segments or arched away from the interior of the mold cavity in concave shape (See paragraph 28).

Braungardt ('751) discloses all the claimed structural limitations, and, thus, the claims are anticipated.

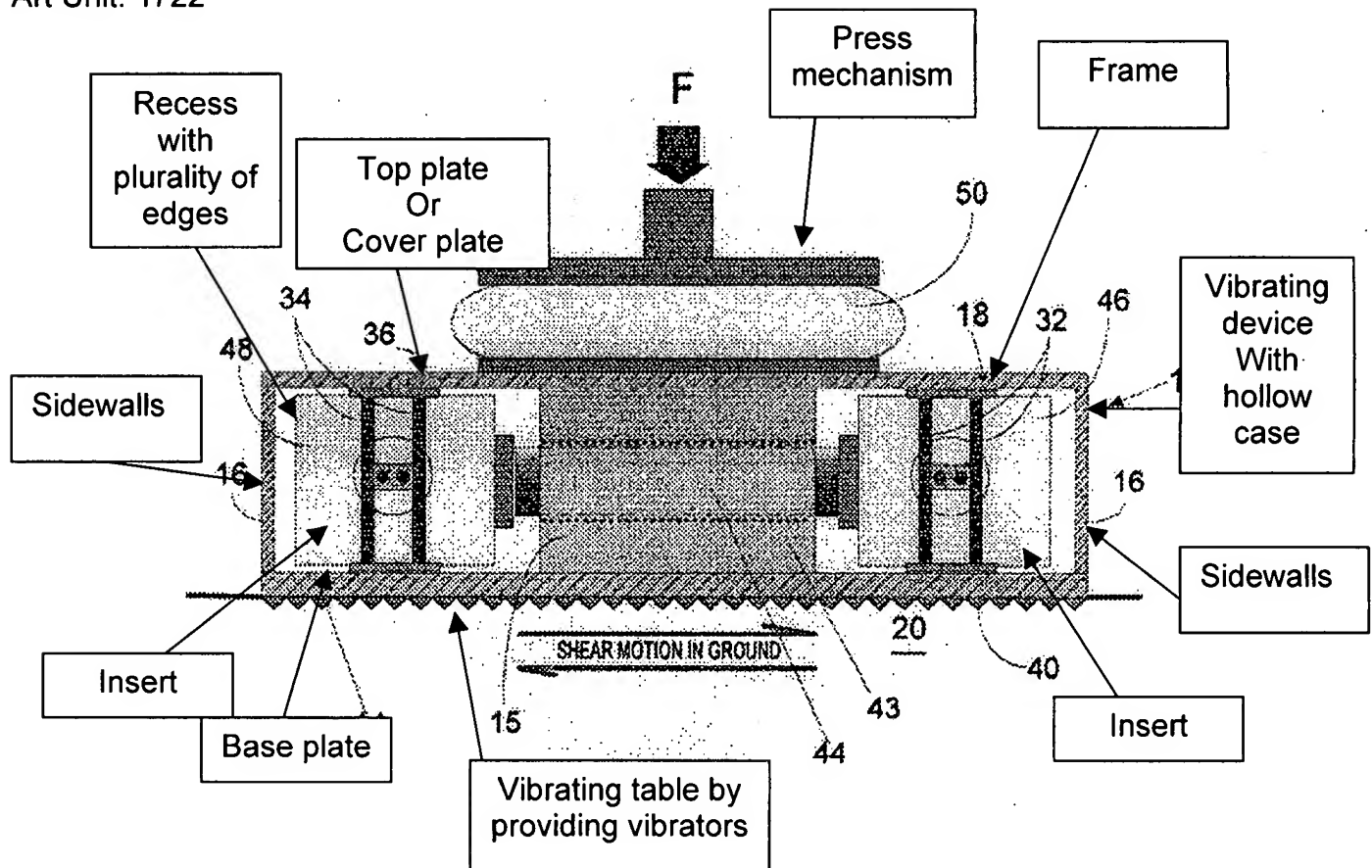
Claims 4-9, and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Owen (U S Patent No. 6,119,804).

Owen ('804) discloses a source of forces and motions at a surface of a solid medium in which soil or other fluid is saturated with water and after that the compressed wave is supplied to the medium to produce a compact of

Art Unit: 1722

the material (see col.1 lines 5-18), which inherently involve to produce a concrete block with the desired dimension.

Owen ('804) further comprises a vibrating device with medium (28,30) as an insert for determining a contour of a molded product (See figure 1A). It further comprises a hollow case having a base plate (14) forming a bottom portion of the case, a top plate (36) as a cover plate vertically distanced from the base plate (14) and forming a top portion of the case; and plurality of end plates (16) as side walls connecting the base plate (14) and the cover plate (36) (See figure 1A). Figure 1A inherently discloses a recess for accommodating an insert (28,30), wherein recess having edges for horizontally supporting the insert (28,30), and vertically supported on the base plate (14) or the cover plate (36) (See figure below).



It further teaches that the vertical plate (26) as a spacer element inserted within the case, at a distance from the insert (28,30), between the cover plate (36) and the base plate (14) (See figure 1A), wherein the spacer element (26) are supported on the inner surface of the cover plate (36) and the base plate (14), which inherently teaches that the spacer element (26) projects into openings in the base plate and the cover plate. It further teaches that the spacer element (26) is welded to the base plate (14) and the cover plate (36) (See figure 1A). Figure 1A further teaches that the insert support itself on the inner surface of the base plate and the cover plate.



Art Unit: 1722

It further teaches that the insert (28,30) is pushed by the press mechanism (50) through the recess of the case from the outside surface of the cover plate (36), until it comes to a stop on a base plate (14) (See figure 1B).

It further teaches that the insert (28,30) is welded to the plates (14,36) through the spring-beams (32,34), which inherently teaches that the insert is welded to the base plate and the cover plate.

It further teaches a coupling mechanism as a positive lock between the frame, which contains sidewalls, the base plate and the cover plate, and the ground medium (See col.2 lines 56-59). But it does not teach or suggest a plurality of bracing elements.

It further discloses a clamping mechanism having a ground screw (42), which is attached to the base plate (14) by threaded fasteners (44) (See col.5 lines 39-45), which inherently teaches the clamping to the molding machine as defined in claim 22.

It further teaches a coupling frame (18) as a junction plate, which is connected with the sidewalls (16) as well as the cover plate (36) and the base plate (14), in the interior of the insert support (see figure 1A).

Owen ('804) discloses all the claimed structural limitations, and, thus, the claims are anticipated.

*Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable Braungardt et al. (U S Publication Application No. 2005/0238751 A1) in view of Van de Caveye (U S Patent No. 4,332,540).

Braungardt ('751) discloses all claimed structural limitations as discussed above, but does not teach or suggest that the cover plate is a part of a bent piece of sheet metal. It further fails to teach or suggest a spacer element.

In the analogous art, Caveye ('540) discloses a concrete block forming apparatus, which comprises a mould (15) as a cover plate, which is a part of the bent piece, having at least two sides that face the other plate in each instance.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Braungardt ('751) by providing a bent piece of the cover plate for forming a rigid unit assembly subjected to the vibration (See col.1 lines 54-51; col.3 lines 19-24) as suggested by Caveye ('540).

Caveye ('540) further discloses a plurality of catching legs (17) as a plurality of spacer elements inserted in the frame (11), at a distance from the insert, between the cover plate (15) and the base plate (14) (See figure 1), wherein spacer elements are welded to the cover plate (15), and supported on the inner surface of the cover plate (15) and the base plate, and projected into the base plate (14) through the protruding portion (25) (See figure 1).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Braungardt ('751) by providing a spacer element for gripping the cover plate (15) in the molding position (See col.3 lines 2-5), and providing secure locking position between the base plate and the cover plate during the molding process (See col.3 lines 12-18) as suggested by Caveye ('540).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable Braungardt et al. (U S Publication Application No. 2005/0238751 A1) in view of Kobayashi (U S Patent No. 6,162,041).

Braungardt ('751) discloses all claimed structural limitations as discussed above, but does not teach or suggest the elastic damping material.

In the analogous art, Kobayashi ('041) discloses a concrete block forming apparatus, which comprises elastic body (4), which is disposed between the receiving plate (5) as an insert and the frame (2a) as an insert

Art Unit: 1722

support (See col.1 lines 36-40), wherein the elastic body such as a rubber for supporting the receiving plate (5) (See col.1 line 23).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Braungardt ('751) by providing the elastic damping material for supporting the insert during the molding process (See col.1 line 23), and providing a concrete block with a high quality without any unevenness in height and breakage (See col.4 lines 60-67) as suggested by Kobayashi ('041).

***Allowable Subject Matter***

Claims 3, 10-13, 15-16, and 20-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggest an arrangement for producing molded brick as defined in claims 3, 10-13, 15-16, and 20 of the instant application. The closest prior art, either Braungardt et al. (U S Publication Application No. 2005/0238751 A1) or Kobayashi (U S Patent No. 6,162,041) or Van de Caveye (U S Patent No. 4,332,540) or Owen (U S Patent

Art Unit: 1722

No. 6,119,804) discloses all claimed structural limitations as discussed above. However, they fail to teach or suggest the plates are engaged into one another with the openings of the U shapes facing one another, rotated by 90 degree as defined in claim 3; the insert is releasably inserted into the case as defined in claim 10; the insert projects beyond the plate as defined in claim 11; the insert with slot for accommodating the core holder as defined in claim 15; the damping means inserted between vertically opposite surface of the relief and the counter-relief as defined in claim 20, and the bracing element as defined in claim 21.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Kobayashi (U S Patent No. 6,162,041)* discloses a concrete block forming apparatus, which comprises a base plate, form, vibrator, and press mechanism. It further comprises an elastic body as a damping mechanism with rubber material. It further comprises a locking mechanism for clamping or unclamping the frame.

*Cichos (U S Patent No. 6,758,665 B2)* discloses a concrete block vibrator, which comprises a vibrator device with a mold box, an underlying pallet as a base plate (See abstract), and locking mechanism.

Art Unit: 1722

*Toffolon et al. (U S Patent No. 4,351,507)* comprises an apparatus for casting concrete structural unit having base (80), plurality of sidewalls (82) and top plate (84). It further comprises a vibrating mechanism.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dimple N. Bodawala whose telephone number is (571) 272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra N. Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1722

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DNB

  
Y. GENDRA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700